

New Mexico State University ARROWHEAD CENTER

LEADING ECONOMIC DEVELOPMENT FOR NEW MEXICO STATE UNIVERSITY



Input from Key Stakeholders in the National Security Technology Incubator

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Live, Learn and Thrive

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Input from Key Stakeholders in the National Security Technology Incubator

1.0 INTRODUCTION

This report documents the input from key stakeholders of the National Security Technology Incubator (NSTI) in developing a new technology incubator and related programs for southern New Mexico. The technology incubator is being developed as part of the National Security Preparedness Project (NSPP), funded by a Department of Energy (DOE)/National Nuclear Security Administration (NNSA) grant. This report includes identification of key stakeholders and description of the input provided. This document is a deliverable due by January 31, 2008, as performance measure 1.4.1 of Grant No: DE-FG52-07NA28084 (reference: Arrowhead Center proposal, Page 16).

The purpose of the NSPP is to promote national security technologies through business incubation, technology demonstration and validation, and workforce development. The NSTI program will focus on serving businesses with national security technology applications by nurturing them through critical stages of early development. The vision of the NSTI program is to be a successful incubator of technologies and private enterprise that assist the NNSA in meeting new challenges in national safety and security. The mission of the NSTI is to identify, incubate, and accelerate technologies with national security applications at various stages of development by providing hands-on mentoring and business assistance.

To achieve success for both incubator businesses and the NSTI program, a true public-private partnership needs to exist. This partnership will allow for maximum results and have a positive impact on the regional communities it serves. The NSTI program will work closely with the identified key stakeholders to ensure that the types of technologies developed in the incubator meet current and future national security technology needs.

2.0 KEY STAKEHOLDERS DEFINED

The NSTI program has defined key stakeholders as individuals or organizations having a vested interest in the success of a small business incubator in the region. This includes entrepreneurs, service providers, community leaders, government agencies, and national laboratories. The key stakeholders may benefit from the technological advancements and/or economic development generated by the incubator. In addition to being a beneficiary of the incubator, key stakeholder entities can add to a successful incubator by helping to market the incubator programs, recruit new promising entrepreneurs, and serve as mentors and advisors to the client participants.

3.0 KEY STAKEHOLDERS IDENTIFIED

NSTI divided identified key stakeholders into two separate categories based on the mutual benefits obtained from the business incubator through either technological advancement or economic growth.

Key stakeholders in the area of technological advancement include:

- Physical Science Laboratory, Las Cruces, NM
- White Sands Missile Range, NM
- Holloman Air Force Base, Alamogordo, NM
- Kirkland Air Force Base, Albuquerque, NM
- Sandia National Laboratories, Albuquerque, NM

- Los Alamos National Laboratories, Los Alamos, NM
- Fort Bliss Army Base, El Paso, TX
- Spaceport America, Upham, NM
- U.S. Border Patrol, Las Cruces, NM

Key stakeholders in the area of economic development include:

- New Mexico State University, Las Cruces, NM
- Mesilla Valley Economic Development Alliance , Las Cruces, NM
- Greater Las Cruces Chamber of Commerce, Las Cruces, NM
- Hispano Chamber of Commerce, Las Cruces, NM
- New Mexico Economic Development Department, Santa Fe, NM
- Bi-National Sustainability Laboratory, Santa Teresa, NM

4.0 KEY STAKEHOLDER INPUT

In November 2007, the Arrowhead Center contracted with the Greenwood Consulting Group Inc. (GCGI) to conduct a feasibility study for construction of a multi-purpose business incubator to serve Southern New Mexico. The feasibility study primarily focused on the region of Doña Ana County and the city of Las Cruces. GCGI conducted approximately 30 interviews with government, community, and business leaders and designed a survey instrument that was disseminated through both electronic and published sources. Some of the aforementioned key stakeholders participated in this feasibility study. GCGI also reviewed secondary market data to assess the applicability of the NSTI program. Items of interest to the NSTI program from this feasibility study are as follows:

- GCGI survey respondents were asked to rate existing business service providers in the Doña Ana County. GCGI concludes there is an important role for an incubator in helping meet the business assistance needs in the Doña Ana County area. In some cases, the incubator may need to provide the services (such as the unmet needs of early-stage and start-up firms) whereas in others, the incubator can play a role in putting small and start-up businesses in contact with relevant and high-quality service providers.
- Survey respondents expressed mixed preferences for the location of the proposed incubator, although the NMSU Arrowhead Research Park garnered, by far, the highest level of support, followed by downtown Las Cruces.
- GCGI found some evidence of unmet need for business assistance among entrepreneurs and small business owners in the Doña Ana County area. Survey respondents indicated that several issues related to marketing and market analysis, business planning, and financing were areas in which they needed assistance. When the needs of only potential incubator tenants are considered, marketing is joined by several common needs of start-up businesses (e.g., legal including incorporation, taxes, business planning, and business registration) as the areas of greatest need.
- Throughout this feasibility project, GCGI heard a number of comments by community leaders about their perceptions of what incubators are and what they do. Whereas some perceptions are accurate, GCGI found some to be either erroneous or based on common thinking of early (e.g., 1980s) incubators instead of current and emerging thought.
- One challenge to increasing incomes and reducing poverty is the relatively large fraction of Doña Ana County adult residents who are not high school graduates

- (26% vs. state and national averages of 16-18%). However, the presence of NMSU and other employers requiring a well-educated workforce is shown in the large fraction of Las Cruces adult residents who have a Bachelor's degree or higher, as well as the fraction that hold Bachelor's or higher degrees (32% vs. 25-27% elsewhere in New Mexico and the nation). This suggests that the Las Cruces area would be relatively attractive for technology-related businesses that require a highly educated workforce. It also suggests that the Doña Ana County area likely will be a good candidate for incubator funding from the Federal government that is based on adverse economic conditions like poverty and unemployment.
- Because companies in the proposed Las Cruces area business incubator likely would be smaller and younger than the national average, the conservative estimate of occupancy for the average tenant in the Las Cruces area incubator is only 600 square feet.
 - Some of the more significant results, in terms of the market for an incubator, are:
 - 100% of the respondents indicated they thought a business incubator was a good idea for the Doña Ana County area;
 - 70% of respondents thought the incubator was something that their business might utilize;
 - Nine respondents, or about 20% of the surveys received, indicated an interest in becoming a tenant of a Las Cruces area business incubator;
 - No respondents indicated interest in becoming "anchor tenants" of the incubator;
 - Another 21 respondents, or about 46% of the surveys received, expressed interest in using common resources and services at the incubator;
 - Ten respondents (22%) said they did not anticipate having a need for the incubator for their own business, which, given the overall strong support for the idea of an incubator in Doña Ana County, is probably a reflection of the survey being completed by some existing mature businesses; and
 - Primary features sought at a Doña Ana County incubator would be office space, high-speed internet access, light laboratory space, and videoconferencing capabilities.
 - Light laboratory space is far more important to potential tenants than it is to the overall pool of survey respondents, although office area continues to be the type of space in greatest demand among potential tenants.
 - With Las Cruces being the largest "urban" area in reasonable proximity to Spaceport America, GCGI expects that economic benefits to the area could include the immigration of space-related manufacturing and service businesses, increased demand for construction contractors, and creation of new space-related small businesses. The impact on the Las Cruces area should be substantial. Estimates of employment associated with the Spaceport America suggest this industry could be equal to 4% to 8% of the total Doña Ana County labor force within the next 10 years.
 - Even as the DEIS suggests that most of the socioeconomic impacts of the massive expansion of Fort Bliss will be felt in the El Paso metropolitan area, community leaders in Doña Ana County and Las Cruces believe some significant impacts will accrue in their communities. In particular, they mention the testing of Future Combat Systems (FCS) components that is expected to occur in the northern portion of Fort Bliss and, possibly, on White Sands Missile Range.

- Statistics reported by the U.S. Census Bureau, which are derived from tax returns to the Internal Revenue Service, indicate there about 11,200 microbusinesses in Doña Ana County. Microbusinesses are defined here as those that are so small they do not have any employees. Most are sole proprietorships of “self employed” individuals, although nationally about 10% are partnerships or corporations without employees. These microbusinesses represent a good market opportunity for a business incubator, because microbusinesses (except for those intentionally set up as part-time endeavors or “hobby businesses”) are growth candidates and could benefit from the environment of an incubator.
- Doña Ana County is significantly above both the national and state averages in the number of microbusinesses, suggesting that the Doña Ana economy is driven much more by microbusinesses than a typical community in the state or nation.
- The number of microbusinesses in Doña Ana County has grown 44% between 1997 and 2005 (more than twice the average of New Mexico), and grew almost four times as fast as regular business establishments. The number of regular businesses in Doña Ana County rose substantially (12%) within the same timeframe.
- Doña Ana County is more entrepreneurial, measured as the number of microbusinesses compared to “regular” businesses and the growth in the number of microbusinesses over time, which means there should be more candidates for clients of the incubator than in an average New Mexico or American community.
- The largest subcategory of microbusinesses is the catch all “other” subcategory, followed by management/scientific/technical consulting at 246 and architecture/engineering at 152. GCGI believes that, the larger the fraction of a subcategory is made up of microbusinesses, the greater the opportunity represented for the incubator. Therefore, subcategories like special design, computer system design, and management/scientific/technical consulting are good candidates for the Las Cruces area incubator. These three subcategories represent over 375 microbusinesses as possible clients/tenants for the Las Cruces incubator.
- Someone familiar with local commercial real estate said there is a shortage of smaller spaces, including a demand from home-based businesses that are expanding and want a more professional location.
- There is a lack of light laboratory space in the community.
- Other landlords do not want to work with tenants seeking small space, short term leases, or built-out space.
- The Physical Science Laboratory at NMSU provides space for several out-of-town firms with which it is working because smaller, short-term/flexible space near campus is not available elsewhere. It was felt that the incubator could meet this need and would be important because of a possible shift in NMSU facility priorities that would eliminate space for “non-NMSU tenants.”
- Local economic developers see a shortage of available space for new and expanding industry, in terms of both availability and quality.
- Outside firms related to Spaceport America and Fort Bliss are already “knocking on our door” to have their space needs accommodated; therefore, one interviewee said “Yes, yes, oh yes” when asked if an incubator is needed in the

Las Cruces area and when asked about the timing he replied “the quicker the better.”

- GCGI believes that one or more anchor tenants in the Doña Ana County incubator would be an important component in terms of financial viability. Although no specific anchor tenant candidates were identified during this feasibility study, GCGI believes there likely are good anchor tenant candidates associated with the Spaceport America and/or Future Combat Systems expansion of Ft. Bliss.
- Local economic development officials are confident there will be a need for “beach-head offices” of major corporations that want to have a presence in the Las Cruces area because of the Spaceport and military expansion, and while some may need a temporary space at something like the incubator (while more permanent facilities are prepared for them), others may be willing to serve as the incubator’s anchor tenant.
- In general, community leaders were supportive of the Arrowhead Center being the champion for this project, particularly for those who envision the incubator’s best location being at the NMSU research park. One area of concern is that no specific individual within the Arrowhead Center has been identified to lead the incubator project’s development and initial operations—GCGI would be more comfortable knowing who the person is and what background they bring to this important role. Overall, GCGI believes that the NMSU Arrowhead Center would be a reasonable candidate as the Doña Ana County incubator champion, and its relationship with former Governor Garrey Carruthers can be an important strength in terms of bringing adequate resources to the project.
- Mesilla Valley Economic Development Alliance (MVEDA) sees the incubator as a valuable and important part of the area’s business and economic development activities.
- GCGI believes that the Arrowhead Center represents a reasonable champion for the Doña Ana County incubator project. It brings important political ties with former Governor Carruthers, which should help garner political and financial support. NMSU has offered land for the incubator on its main campus research park, which would make it more logical to have a university-affiliated entity like the Arrowhead Center as its developer.
- Expectations for services of potential incubator participants include:
 - Marketing (16 responses)
 - Finding qualified employees (15)
 - Market analysis (12)
 - Business planning (9)
 - Finding financing (9)
- Given the interest in legal issues among potential tenants, the proposed incubator would be advised to establish relationships with attorneys, both locally and perhaps in Albuquerque and El Paso if specialization is needed, who can adequately counsel and assist local entrepreneurs and small business owners about their legal concerns.
- There is a reasonable level of consistency between the expressed needs of all survey respondents and those respondents who are potential incubator tenants. This indicates that the Doña Ana County business incubator could provide some services that would be valued both by tenant companies and outside firms that

are not located in the incubator but wish to access services and resources there. Known as “affiliates,” these non-tenant clients can be important participants in an incubator program and are a very common phenomenon in incubation.

- GCGI believes that most under- or un-met business assistance needs can be addressed by the incubator, either directly or by the incubator locating suitable sources of that assistance for its clients and tenants.
- GCGI interviewed representatives of several public/non-profit and private/for-profit business services providers during the course of this project. Most were found to be interested in and supportive of the incubator. Overall, the service providers that GCGI interviewed did not view an incubator as a competitor for their clients. Although this attitude might change somewhat when the incubator becomes a reality and/or its specific services and functions are identified, GCGI finds this acceptance to be positive.
- The incubator particularly is needed to fill an apparent gap in services for start-up businesses. There appears to be an additional role for the incubator to link its tenants and affiliates to credible and qualified local sources of assistance, particularly non-profit/public ones, because these sources do not appear to be adequately utilized. This collectively causes GCGI to conclude that there is a legitimate and important role for an incubator in meeting the business assistance needs of Las Cruces area small and start-up businesses.
- The real strength of the Las Cruces area incubator is the market. Although the number of survey responses received was not impressive, the secondary data pertaining to Spaceport America, Fort Bliss expansion, microbusiness activity, and opportunities related to the Physical Science Laboratory all point to a significant market for a business incubator in Doña Ana County. Unlike some communities that have only one strength in the secondary data that might lead to a greater level of small business formation, this area has four; therefore, the growth in entrepreneurial activity in Doña Ana County is not just dependent on development of Spaceport America or transition of microbusinesses into larger business entities.

Primary input from key stakeholders in addition to the feasibility study also includes:

- MVEDA indicates there is a strong need for incubator space in the region that caters to start-up businesses and small businesses looking to expand in the fields of engineering and technology. Additionally, there is a need for programs and assistance to guide these businesses toward success.

5.0 CONCLUSION

Major federal, state, and private sector key stakeholders have been identified, and input sought for the NSTI program. The Arrowhead Center enjoys rich relationships with these key stakeholders. These relationships will result in a strong NSTI program through the leverage of resources for joint research projects and mentoring of NSTI program participants.